

ISSN: 2322-3669



Miras-e Elmi-ye
Eslam va Iran

Semiannual Journal on the Scientific Heritage
of
Islam and Iran

vol. 3, no. 1, Spring & Summer 2014

Managing editor: **Akbar Irani**
Chief Editor: **Mohammad Bagheri**
Publisher: **Written Heritage Research Institute**

Tehran, Iran

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Editorial

Scientific cooperation has always been an efficient factor in promotion of peace and mutual understanding between different nations. International gatherings are attractive environments and pleasant atmospheres in which person-to-person contacts lead to scientific cooperation in institutional level. Such events are usually free from political issues and prejudices. Unfortunately, we have observed unjustifiable behaviours in this regard in recent years. Some Iranian historians of science were deprived of participation in the 24th International Congress for the History of Science, Technology, and Medicine held in Manchester in summer 2013. Rejection of their visa application was in strict contradiction with the Declaration issued in the Congress. In item 5 of the Declaration, we read: "Historians of science, technology and medicine can build bridges between different cultures through collaboration and examination of different perspectives, heritages and styles of thinking." Another case was the bureaucratic obstacles in issuing conference visas for the Iranian historians of science who were invited to attend a conference in memory of Bhaskaracharya (12th century Indian mathematician and astronomer) to be held in India in autumn 2014. The formal invitation letters and the plane tickets were sent by the organizers. But the embassy asked for conformation letters for each applicant, from Indian ministries of Internal Affairs, Foreign Affairs, and Higher Education. Such a complicated condition was never observed in other international scientific gatherings. In spite of all the efforts of the organizers and the invited speakers, the procedure was not completed and the visas were not issued without even reimbursing the prepaid visa fees. At the same time, several Iranians visited India for tourism or business. We sincerely hope that the authorities in charge of this issue notice the inefficiency of the rules and the negative impression created by such superfluous and harmful regulations. In this hope, I have written down the above unfavorable cases.

Abstracts of Persian Articles

A List of Sundails in Iran

Mohammad Bagheri

Sundails were used in Iran since long time ago. There are some materials from pre-Islamic texts which contain mathematical information about measuring time by means of the length or the direction of a gnomon's shadow. In the Islamic civilization several texts were composed on sundials and from historical sources we know that sundials were made and used in Iran for measuring time and keeping prayer times. In recent decades the sundials have become a subject of interest due to their historical, mathematical and astronomical implications. In many universities, schools, sacred places, mausolia, parks and squares, sundials are constructed and regarded as educational objects and cultural monuments. Publication of books, organizing lectures and workshops and arranging expositions of sundials and their photos are tokens of the revival of interest in sundials. Since some years ago the day which coincides with summer solstice has been recognized as the sundial feast in Iran. In this paper a relatively detailed account of these materials, sources and activities are described. There are also some pieces of information about the sundials which have been destroyed or rediscovered and the natural instruments used in non-urban regions for defining the noon time or the equinoxes. Then three tables are provided for: 1) sundials in Iran; 2) noon-markers in Iran; and 3) natural chronometrical instruments in Iran, each containing 123, 24 and 12 items, respectively.

Johannes Serapion (Yūḥannā ibn Sarābiyūn) the forgotten eminent physician

Younes Karamati

Yūḥannā ibn Sarābiyūn (Yaḥyā ibn Sarāfiyūn) one of the last popular physicians with classical Syriac writings, lived in the middle of the 9th century in Baghdad. He probably was a follower of the Academy of Gondishāpūr and perhaps a student of its famous Medical School. Like all the students of the school, he has written his works in Syriac, and considering his *Al-Kunnāsh al-Ṣaghīr* (*Small Compendium*) indicates that he had access not only to the works of the popular authors of the medical school but also some of the works of its anonymous scholars.

His two Compendiums were translated from Syriac into Arabic, one *Al-Kunnāsh al-Kabīr* (*Large Compendium*) in 12 parts translated by him and the other, *Al-Kunnāsh al-Ṣaghīr* in 7 parts. Gerard of Cremona (c. 1114–1187) translated *Al-Kunnāsh al-Ṣaghīr* into Latin, for the first time published in Venice in 1479 and then in various parts of Europe. Later, Andreas Alpāgus, between 1487 and 1517, perhaps by editing Gerard's translation, prepared another Latin version of *Al-Kunnāsh al-Ṣaghīr*. Mūsā ibn Maslyāh and probably Joannes of Cremona have also translated Gerard's Latin translation into Hebrew.

'Ali ibn 'Abbās al-Majūsī al-Ahwāzī (*Haly Abbas*) in the preface of *Kāmil al-Ṣanā'at* has strongly criticized Ibn Sarābiyūn, while the other physicians generally have appreciated him among whom are the author of *Al-Dhakhīrah* (pseudo-Thabit), Abū Sahl Bishr ibn Ya'qūb (2nd half of the 10th century) in *Al-Rasā'il al-Ṭibbiyah*, 'Ali ibn 'Isā Kaḥḥāl (d. after 1010 AD) in the preface of *Tadbkirat al-Kaḥḥālīn*, Ibn abī Ṣādiq (c. 995-1077 AD) in his commentary on *Ḥunayn's Masā'il* (Questions on Medicine), and 'Abd al-Laṭīf al-Baghdādī (d. 1232 AD) in the closing part of the first chapter of *K. Al-Naṣīḥatayn*; They all have highly appreciated Ibn Sarābiyūn and his [*Small?*] *Compendium* and recommended its study to the medical students.

Popular authorities like Rāzī (Rhazes), Ibn Sīnā (Avicenna), Abū Rayḥān al-Bīrūnī, and several other Islamic and Medieval physicians have benefitted from Ibn Sarābiyūn's compendiums. There are three Arabic translations, one revised version, two Latin translations and two Hebrew translations of *Small*

Compendium; they all indicate clearly that Ibn Sarābiyūn had found a special place among the physicians of his time.

However, Lucien Leclerc has already had an almost thorough research on the sources of *Small Compendium*. Other aspects like his role in transmission of medical traditions, how and to what extent the Islamic physicians have benefited from his works, have been neglected. I have a brief review on the above mentioned aspects in this article, the most significant conclusion of which, leads us to the fact that, borrowing from the last (7th) part of *Small Compendium* almost verbatim with long and numerous quotations, Ibn Sarābiyūn's *Small Compendium* has been the main source of Avicenna's last (5th) book (*Qarābādihīn/* compound drugs) of *al-Qānūn*, while he has only mentioned his name twice.

The Clepsydra of the Tower of Winds in the Roman Agora of Athens

Mohammad-Javad Nategh

The name of water clocks is rooted in their water actuators. The history of the use of water clocks goes back to the ancient civilizations such as Babylon, Chaldea, Phoenicia, Egypt, Elam, Medes, and Assyria. This history has been recorded by many researchers such as Pierre Dubois. One of the oldest water clocks some remains of which still exist can be tracked down in the Tower of the Winds located in the Roman Agora at Athens. This place served as the house of the Turk dervishes where, for some time, they worshipped and had their wonderful dance. This has provided good cause for partially investigating the history of this clock in the present paper. It should be noted that the technology of water clocks has witnessed a continuous change and widespread use especially in some regions such as Iran, Syria, Morocco and Andalusia. Some remains of these clocks and also written materials about them have survived among which can be named the books *ʿIlm al-saʿāt waʾl-ʿamal bihā* (*On the Construction of Clocks and their Manufacture*) by Riḍwān and *al-Jāmiʿ bain al-ʿilm waʾl-ʿamal al-nāfiʿ fi šināʿat al-ḥiyāl* (*The Book of Knowledge of Ingenious Mechanical Devices*) by al-Jazarī. Al-Jazarī has presented detailed description of six kinds of water clocks in his book.

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